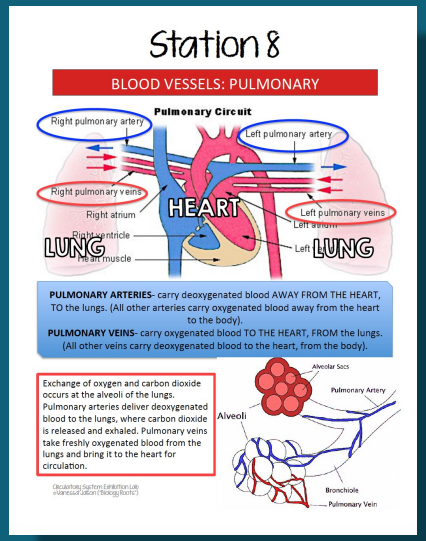
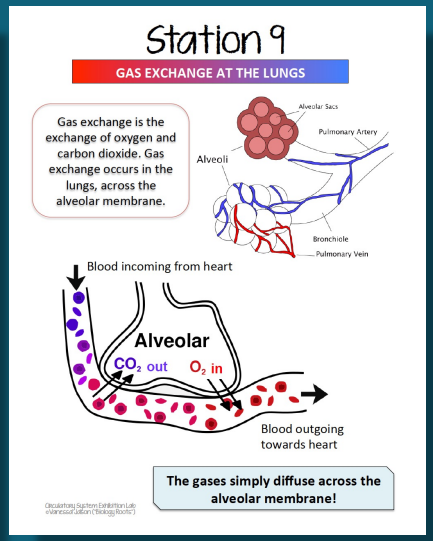
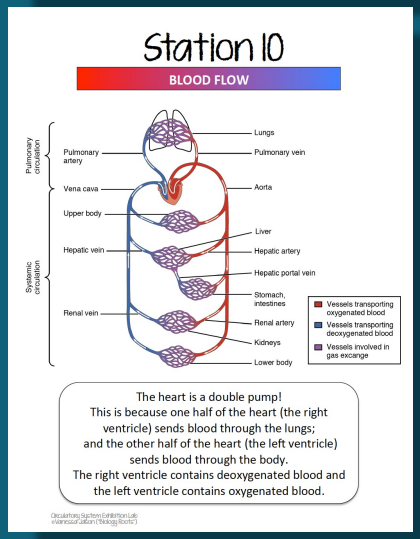
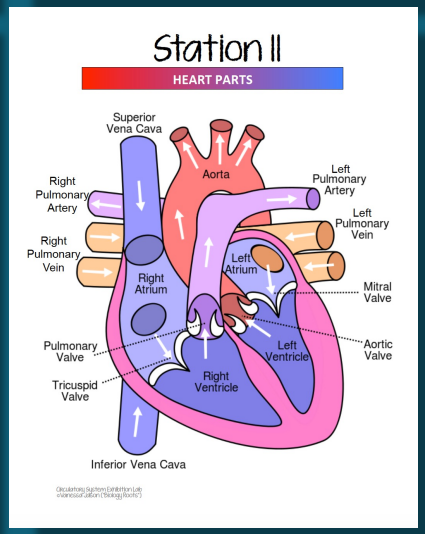
circulatory systems *stations*









*Stations are editable

"I used this activity for my evaluation visit. My boss was impressed. The students enjoyed it and were engaged. A win/win!." – *Gail S.*

"I [used this resource] in my Anatomy & Physiology class. This was perfect. I paired students and they rotated through the stations. It covers all the basics of circulation and the major structures involved. Loved it and will be using it again." - *Candace M.*

"Fantastic resource! Rather than falling asleep during a lecture, my students determined answers for themselves at stations. Love that there is the option to edit." – *Lindsey S.*

biology roots

human body systems stations

circulatory system

28 total stations

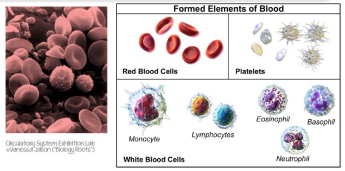
Station 4

BLOOD: FORMED ELEMENTS

Red blood cells (RBCs) carry oxygen, carbon dioxide, and enzymes throughout the bloodstream.

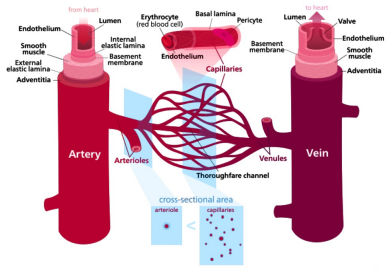
White blood cells (WBCs) work together to fight infection. The blood carries white blood cells to parts of the body that might contain pathogens.

Platelets- "sticky" proteins that prevent blood loss by forming plugs in blood vessels.



Station 5

BLOOD VESSELS



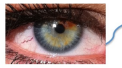
Arteries carry blood away from the heart.
Veins carry blood towards the heart.
Capillaries are a bridge between arteries and veins (very small!)

Arteries branch into smaller

Venules are smaller veins

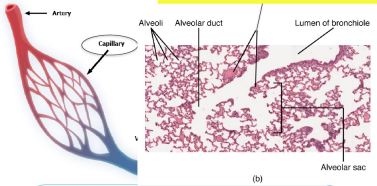
Station 6

BLOOD VESSELS: CAPILLARIES



Capillaries in the eye tissue

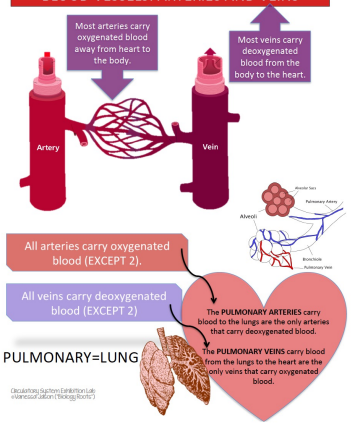
Capillaries in respiratory tissue



Capillaries are bridged between the arteries and veins.
Capillaries are the tiniest blood vessels.
Capillaries can carry oxygenated blood and deoxygenated blood.
The capillaries are the blood vessels in which red blood cells deliver oxygen and nutrients ***to cells*** and picks up

Station 7

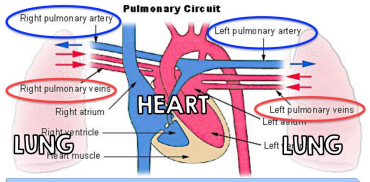
BLOOD VESSELS: ARTERIES AND VEINS



✓ **All stations are Editable**

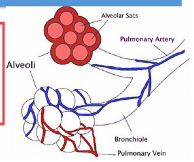
Station 8

BLOOD VESSELS: PULMONARY

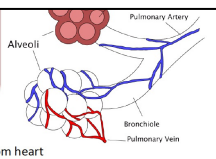


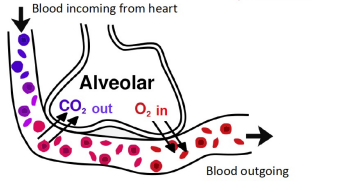
PULMONARY ARTERIES- carry deoxygenated blood AWAY FROM THE HEART, TO the lungs. (All other arteries carry oxygenated blood away from the heart to the body).
PULMONARY VEINS- carry oxygenated blood TO THE HEART, FROM the lungs. (All other veins carry deoxygenated blood to the heart, from the body).

Exchange of oxygen and carbon dioxide occurs at the alveoli of the lungs. Pulmonary arteries deliver deoxygenated blood to the lungs, where carbon dioxide is released and exhaled. Pulmonary veins take freshly oxygenated blood from the lungs and bring it to the heart for circulation.

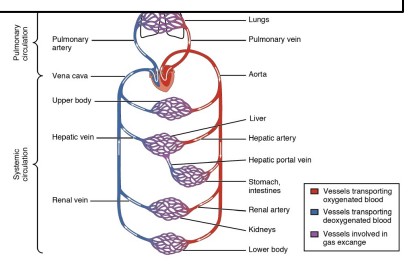


exchange of oxygen and carbon dioxide. Gas exchange occurs in the lungs, across the alveolar membrane.





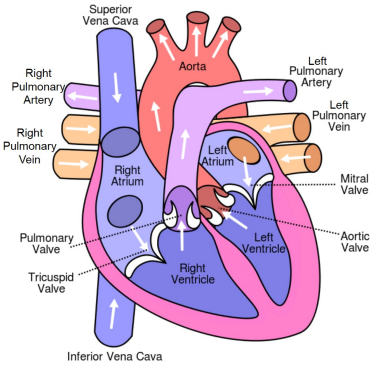
The gases simply diffuse across the alveolar membrane!



The heart is a double pump!
This is because one half of the heart (the right ventricle) sends blood through the lungs; and the other half of the heart (the left ventricle) sends blood through the body.
The right ventricle contains deoxygenated blood and the left ventricle contains oxygenated blood.

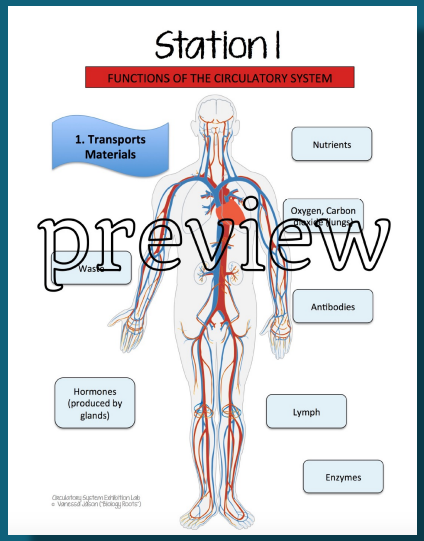
Station 11

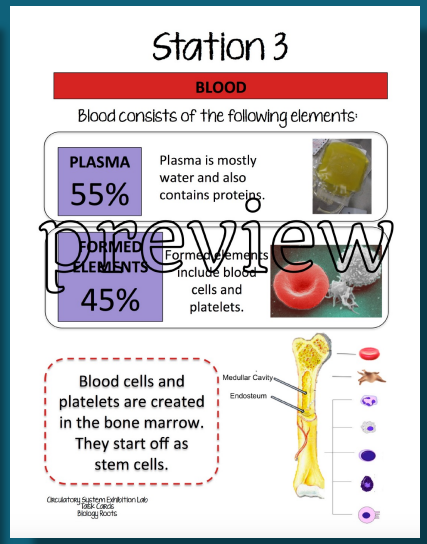
HEART PARTS

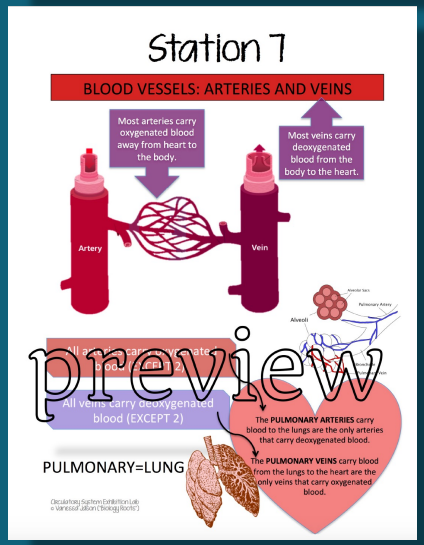


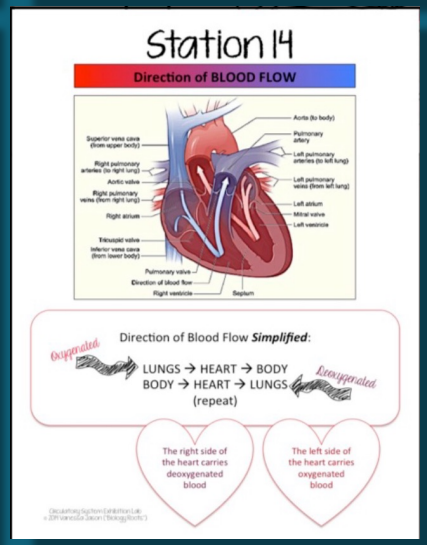
Zoom to read

circulatory systems *stations*









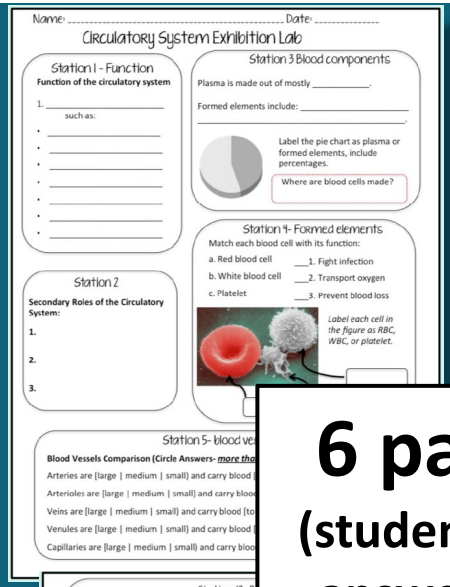
Topics covered:

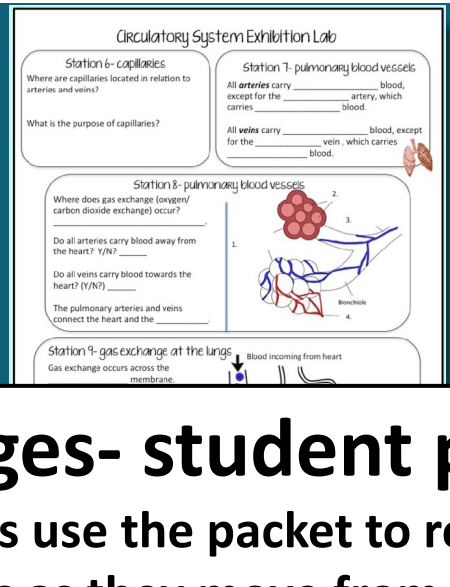
- ♡ Function and structure of the circulatory system: specific organs (heart; blood vessels; blood)
- ♡ Relationship to other body systems
- ♡ Veins, arteries, capillaries
- ♡ Direction of blood flow
- ♡ Oxygenated blood | Deoxygenated blood
- ♡ Heart diseases and surgical procedures
- ♡ Fun Facts station
- ♡ Mini labs: Heart rate and microscope observation

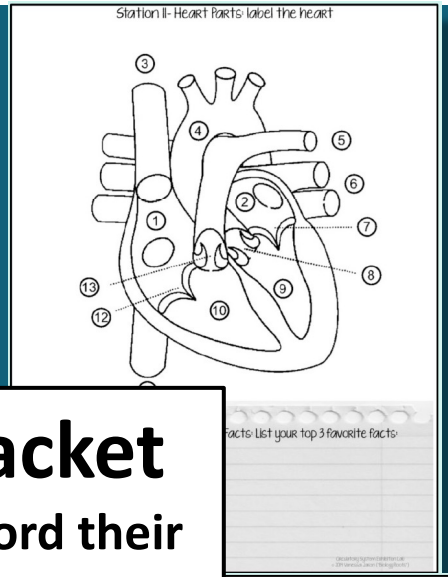
biology roots

human body systems *stations*

circulatory system

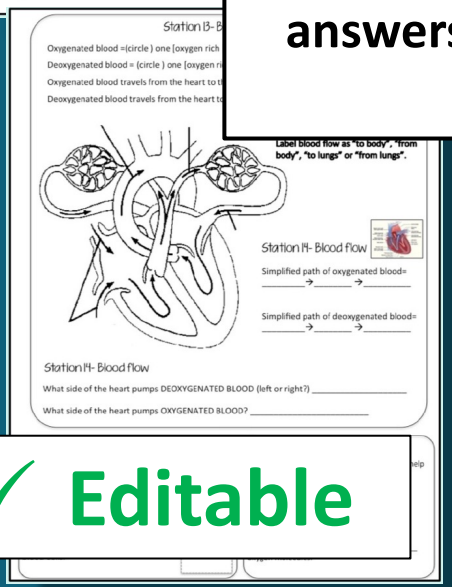


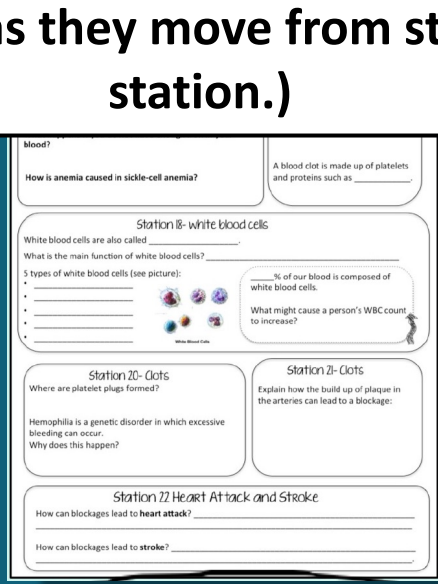


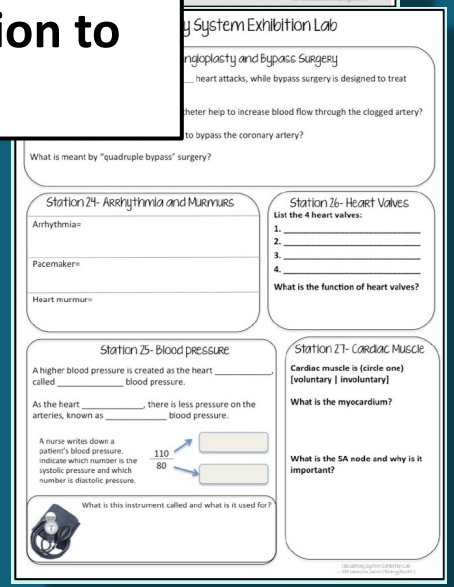


6 pages- student packet

(students use the packet to record their answers as they move from station to station.)







✓ **Editable**

human body systems *stations*

circulatory system

Station 4

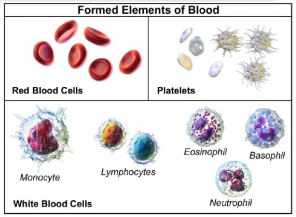
BLOOD: FORMED ELEMENTS

Red blood cells (RBCs) carry oxygen, carbon dioxide, and enzymes throughout the bloodstream.

White blood cells (WBCs) work together to fight infection. The blood carries white blood cells to parts of the body that might contain pathogens.

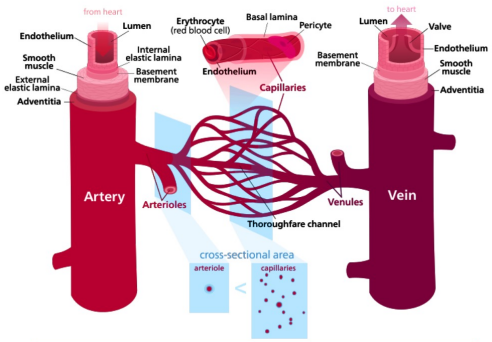
Platelets- "sticky" proteins that prevent blood loss by forming plugs in blood vessels.





Station 5

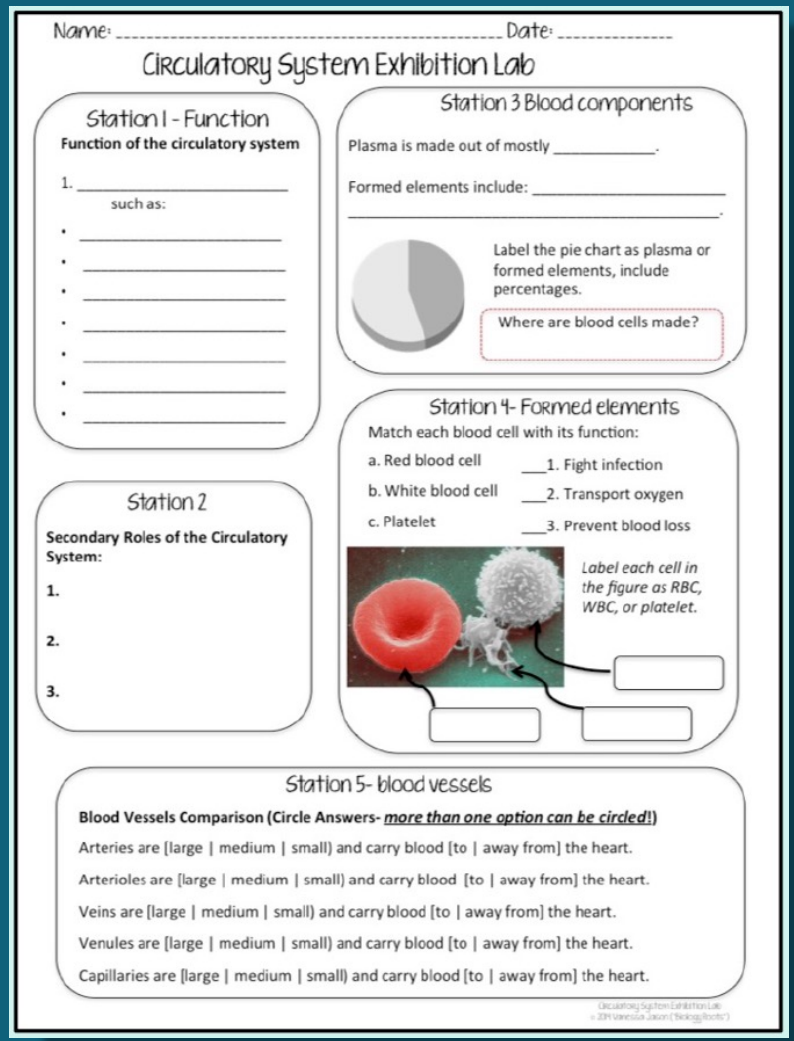
BLOOD VESSELS



Arteries carry blood away from the heart.
Veins carry blood towards the heart.
Capillaries are a bridge between arteries and veins (very small!)

Arteries branch into smaller vessels known as "arterioles".

Venules are smaller veins that lead to larger veins.



Name: _____ Date: _____

Circulatory System Exhibition Lab

Station 1 - Function

Function of the circulatory system

1. _____

such as:

- _____
- _____
- _____
- _____
- _____
- _____
- _____

Station 3 Blood components

Plasma is made out of mostly _____.

Formed elements include: _____

_____.

Label the pie chart as plasma or formed elements, include percentages.

Where are blood cells made?

Station 2

Secondary Roles of the Circulatory System:

1.

2.

3.

Station 4- Formed elements

Match each blood cell with its function:

a. Red blood cell ___1. Fight infection

b. White blood cell ___2. Transport oxygen

c. Platelet ___3. Prevent blood loss

Label each cell in the figure as RBC, WBC, or platelet.

Station 5- blood vessels

Blood Vessels Comparison (Circle Answers- *more than one option can be circled!*)

Arteries are [large | medium | small) and carry blood [to | away from] the heart.

Arterioles are [large | medium | small) and carry blood [to | away from] the heart.

Veins are [large | medium | small) and carry blood [to | away from] the heart.

Venules are [large | medium | small) and carry blood [to | away from] the heart.

Capillaries are [large | medium | small) and carry blood [to | away from] the heart.

✓ Example: stations 4 & 5

Zoom stations 4 and 5 on the student answer sheet to get an idea of how students record answers.

human body systems

circulatory system stations

Station 28

MICROSCOPE

View the cardiac muscle through the microscope. Please do not touch the knobs.



Station 29

HEART RATE | PULSE

Heart rate is measured as beats per minute. Pulses are the sensations you can feel from your heart beating and are used to measure your heart rate.

the number of beats over a minute.



Compare your heart rate to at least two others in the class!

Mini lab stations: observation stations- microscope and heart rate

human body systems *stations*

Classes this resource supports: This set of stations can be used in a general biology class to teach or reinforce body systems. This resource can also be used in an anatomy class.

How to Use this Product:
The stations are designed to be posted around a room or hallway. Students travel from station to station (in any order) while recording their answers on the student answer sheet provided.
Both the stations and student answer sheet are editable (in case you'd like to alter or delete stations.)

Reviewing the stations and making any changes before printing is recommended. Laminating the stations or placing them in sheet protectors will give them more life.

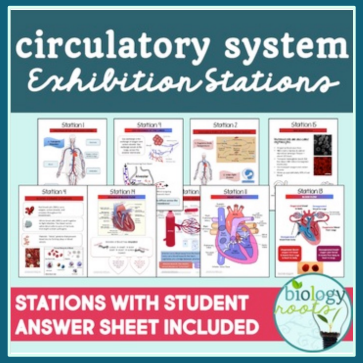
*These stations take approximately 2 class periods to complete. Depending on the level or grade of your class, you may need to adapt or shorten the stations.

Ties in with the following NGSS performance expectations:

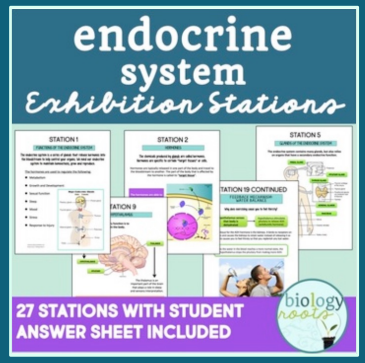
HS-LS1-2- Develop and use a model to demonstrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
(Body systems are not directly a performance expectation of NGSS; but these stations can be adapted and used to support organization of life and homeostasis.)

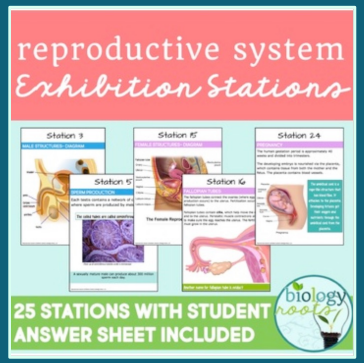
Cross-Content Connections		
SEP (Science and Engineering Practices)	**DCI (Disciplinary Core Ideas)**	**CC (Crosscutting Concepts)**
Develop and use models; construct explanations and design solutions	Structure and function	Structure and function

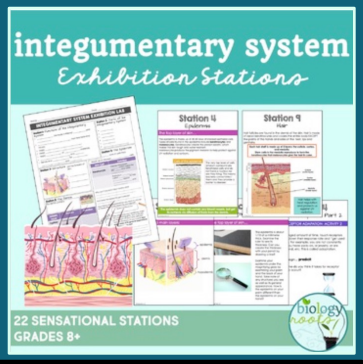
BUNDLE of my 11 body system stations:

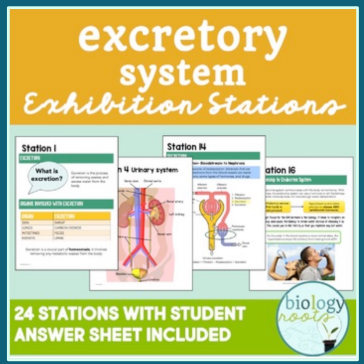


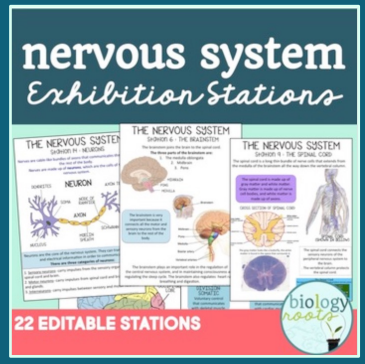








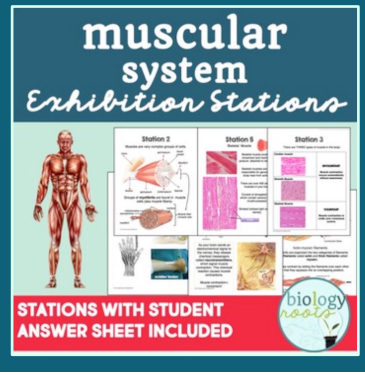


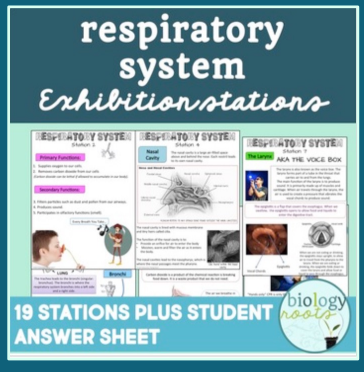




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Link to store for Q&A: Biology Roots email: vanessa@biology-roots.com

Thank you so much for supporting biology roots

I hope you enjoy the resources and they benefit your students!

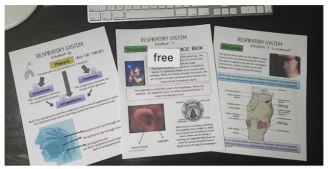
FEEDBACK

If you are happy with your purchase please consider leaving feedback as to what you enjoyed about the resource and how you used it in the classroom. Your feedback always motivates me and inspires me to keep creating content!

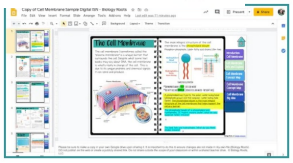
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Sample Body System Stations



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